PLS FILE MO27 607

JUMBO MINING COMPANY 6305 FERN SPRING COVE AUSTIN, TX 78730 PH: 512-346-4537 FAX 512-346-3188



February 19, 1997

Mark Novak
Division of Water Quality
Department of Environmental Quality
288 North 1460 West
P.O. Box 114870
Salt Lake City, Utah 84114-4570

RE: Response to your letter dated January 24, 1997

Dear Mr. Novak:

We have received your letter dated January 24, 1997 and are submitting additional analytical results from heap runoff samples collected on January 3, 1997 in a joint sampling effort with DOGM. The results of the sampling are additional proof that the heaps at the Drum Mine have been rinsed to industry standards. The samples were collected after the rain had stopped, hence, there was no dilution from direct rainfall onto the ditch or other sources. Sample 197H2 was collected from runoff flowing directly out of Heap 2 and the other two samples were collected from pipes at the preg pond. The analytical results are given below as well as a comparison chart of heap runoff.

Your letter stated that previous samples were not collected according to proper sampling procedures. In our telephone conversation, you mentioned the only procedure not followed was that the water collected for metals wasn't filtered and could lead to erroneous results. By not screening, any sediment in the sample might contain metals and would show up in analysis as total metals and not dissolved metals. This is evidenced by our recent sampling of Heap 2 (sample 197H2) which contain a lot of sediment and the analytical results showed the lead content to be 0.08 ppm. After talking with American West Analytical, the chemist mentioned that the lead was in the sediment and the clear solution contained no dissolved lead. If any future sample contains sediment, the sample will be filtered in the field or by the analytical lab. Since the results from previous sampling were all below drinking standards for metals, filtering the water in the field would only have given lower content for metals.

I have been in contact with Sheri Wysong of the BLM in order to coordinate future sampling. A map showing future sampling sites, directions of pad drainage and types of ditch liners has already been mailed to you.

Our consultant, Evert Lawton, will be contacting you to discuss what is required in our ground water application.

Sincerely:

Dave Hartshorn

cc: Sheri Wysong, BLM Wayne Hedberg, DOGM



AMERICAN WEST ANALYTICAL

LABORATORIES

Client: Jumbo Mining

Date Sampled: January 3, 1997
Lab Sample ID.: 28148
Set Description: Three Water Samples

Contact: Ed King

Date Received: January 6, 1997 Received By: Elona Hayward

Analysis Requested:

Method Ref. Number:

Cyanide (WAD)

335.3

463 West 3600 South Salt Lake City, Utah 84115

(801) 263-8686

Toll Free (888) 263-8686 Fax (801) 263-8687

Analytical Results
Units = mg/L

Field Sample ID	Lab Sample ID	Reporting <u>Limit</u> :	Amount Detected:
Drum Mine/197 H1 J	28148-01	0.005	0.12
Drum Mine/197 H2 J	28148-02	0.005	0.013
Drum Mine/197 JI4/5 J	28148-03	0.005	0.023

Released by:

Laboratory Supervisor



Client: Jumbo Mining Date Sampled: January 03, 1997

Contact: Ed King Date Received: January 06, 1997

AMERICAN WEST ANALYTICAL **LABORATORIES**

463 West 3600 South Salt Lake City, Utah

84115

Field Sample ID:

DRUM MINE 197 H1 J

Lab Sample ID: L28148-1

Analytical Results

Units = mg/L			
TOTAL METALS	Method <u>Used</u> :	Reporting <u>Limit:</u>	Amount <u>Detected:</u>
Arsenic	7060	0.005	0.021
Cadmium	6010	0.004	< 0.004
Chromium	6010	0.01	0.01
Lead	6010	0.05	< 0.05
Mercury	7470	0.001	< 0.001

(801) 263-8686 Toll Free (888) 263-8686 Fax (801) 263-8687

Laboratory Supervisor

Report Date: January 16, 1997



Client: Jumbo Mining Date Sampled: January 03, 1997

Contact: Ed King Date Received: January 06, 1997

AMERICAN WEST ANALYTICAL LABORATORIES

Field Sample ID: DRUM MINE

Lab Sample ID:

L28148-1

197 H1 J

Analytical Results Units = mg/L

463 West 3600 South Salt Lake City, Utah 84115

OTHER CHEMISTRIES	Method <u>Used</u> :	Reporting <u>Limit:</u>	Amount Detected:
Chloride	4500 CLB	0.5	1900.
Cyanide (TOTAL)	335.3	0.005	0.5
Nitrite/Nitrate	353.2	0.01	75.
pН	150.1	0.1	8.3
TDS	160.1	1.0	4500.

(801) 263-8686 Toll Free (888) 263-8686 Fax (801) 263-8687

aboratory Supervisor

Report Date: January 16, 1997



Client: Jumbo Mining Date Sampled: January 03, 1997

Contact: Ed King Date Received: January 06, 1997

AMERICAN WEST ANALYTICAL **LABORATORIES**

Field Sample ID:

DRUM MINE 197 H2 J

Lab Sample ID: L28148-2

Analytical Results

Units = mg/L TOTAL METALS	Method	Danarting	Amount Detected:
	<u>Used:</u>	Reporting <u>Limit:</u>	
Arsenic	7060	0.005	0.048
Cadmium	6010	0.004	< 0.004
Chromium	6010	0.01	< 0.01
Lead	6010	0.05	0.08
Mercury	7470	0.001	< 0.001

(801) 263-8686 Toll Free (888) 263-8686 Fax (801) 263-8687

463 West 3600 South Salt Lake City, Utah

84115

Laboratory Supervisor

Report Date: January 16, 1997



Client: Jumbo Mining Date Sampled: January 03, 1997

Contact: Ed King Date Received: January 06, 1997

AMERICAN WEST ANALYTICAL **LABORATORIES**

Field Sample ID:

DRUM MINE 197 H2 J

Lab Sample ID: L28148-2

Analytical Results Units = mg/L

463 West 3600 South Salt Lake City, Utah 84115

OTHER CHEMISTRIES	Method Used:	Reporting <u>Limit:</u>	Amount Detected:
Chloride	4500 CLB	0.5	520.
Cyanide (TOTAL	335.3	0.005	0.067
Nitrite/Nitrate	353.2	0.01	18.
pH	150.1	0.1	8.5
TDS	160.1	1.0	1700.

(801) 263-8686 Toll Free (888) 263-8686 Fax (801) 263-8687

Laboratory Supervisor

Report Date: January 16, 1997



Client: Jumbo Mining Date Sampled: January 03, 1997

Contact: Ed King Date Received: January 06, 1997

AMERICAN WEST ANALYTICAL **LABORATORIES**

Field Sample ID:

DRUM MINE 197 H4/5 J

Lab Sample ID: L28148-3

Analytical Results

Units = mg/L

oma- mg/D	Method	Reporting	Amount
TOTAL METALS	Used:	Limit:	Detected:
Arsenic	7060	0.005	0.032
Cadmium	6010	0.004	< 0.004
Chromium	6010	0.01	0.01
Lead	6010	0.05	< 0.05
Mercury	7470	0.001	< 0.001

(801) 263-8686 'oll Free (888) 263-8686 Fax (801) 263-8687

463 West 3600 South Salt Lake City, Utah

84115

Laboratory Supervisor

Report Date: January 16, 1997



Client: Jumbo Mining Date Sampled: January 03, 1997

Contact: Ed King Date Received: January 06, 1997

AMERICAN WEST ANALYTICAL **LABORATORIES**

Field Sample ID:

DRUM MINE 197 H4/5 J

Lab Sample ID: L28148-3

Analytical Results
Units = mg/L

163 West 3600 South Salt Lake City, Utah 84115

OTHER CHEMISTRIES	Method <u>Used</u> :	Reporting <u>Limit:</u>	Amount Detected:
Chloride	4500 CLB	0.5	640.
Cyanide (TOTAL)	335.3	0.005	0.077
Nitrite/Nitrate	353.2	0.01	22.
pН	150.1	0.1	8.4
TDS	160.1	1.0	1900.

(801) 263-8686 ll Free (888) 263-8686 Fax (801) 263-8687

Laboratory Supervisor

Report Date: January 16, 1997